

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-024722**Date Inspected:** 25-Jun-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	N/A	<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>
<b>Inspected CWI report:</b>	<b>Yes</b> <b>No</b> <b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b> <b>No</b> <b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b> <b>No</b> <b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b> <b>No</b> <b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
		<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Bridge No:</b>	34-0006	<b>Component:</b>	OBG Trial Assembly	

**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

Bike Path Railing at Bay 9

This QA Inspector performed Dimension Control Inspection for measuring Bike Path Handrail (Long one's) to the Divider Rails. The Inspection was performed against the Inspection Notification # 09584 dated June 25, 2011.

Observed the Bike Paths are installed on the Test Jig in the following mentioned sequence.

BKR-AN-15 PP115~PP117 to BKR-AN-19-PP115

Measured the locations as per DCP form at the following locations.

Overall Sweep at Top Pipe A1, A2, A3 and A4 locations.

Intermediate Sweep at Pipe next to the Top B1, B2, B3, B4, B5, B6, B7, B8 and B9 locations.

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Intermediate Sweep at Top to the next pipe C1, C2, C3, C4, C5, C6, C7, C8 and C9 locations.

Gap between the Top Pipe to the Pipe next to the Top D1, D2, D3, D4, D5, D6, D7, D8 and D9 locations.

Gap between the Bottom Pipe to the Flat Base at E1, E2, E3, E4, E5, E6, E7, E8 and E9 locations.

Gap Between the Bike Path Railing Top pipe to the Divider Bike Path Railing pipe at location G.

Vertical offsets at locations V3, V4, V5, V6, V7, V8, V9 and V10.

Measured the Offset between the Bike Path Railing Top pipe to the Divider Bike Path Railing pipe at locations M1 and M2.

Performed the Dimensional Inspection and observed results are in general compliance with the tolerances, during the course of inspection ZPMC Mr. Chen Shi Gang and ABF Mr. Liu Cheng were present. Informed the results of Inspection to Caltrans Lead Inspector for further disposition.

Please reference the pictures attached for more comprehensive details.

### Bike Path Railing at Bay 9

This QA Inspector performed Dimension Control Inspection for measuring Bike Path Handrail (Long one's) to the Divider Rails. The Inspection was performed against the Inspection Notification # 09584 dated June 25, 2011.

Observed the Bike Paths are installed on the Test Jig in the following mentioned sequence.

BKR-AN-22 PP117~PP119 to BKR-AN-16-PP119~121

Measured the locations as per DCP form at the following locations.

Overall Sweep at Top Pipe A1, A2, A3 and A4 locations.

Intermediate Sweep at Pipe next to the Top B1, B2, B3, B4, B5, B6, B7, B8 and B9 locations.

Intermediate Sweep at Top to the next pipe C1, C2, C3, C4, C5, C6, C7, C8 and C9 locations.

Gap between the Top Pipe to the Pipe next to the Top D1, D2, D3, D4, D5, D6, D7, D8 and D9 locations.

Gap between the Bottom Pipe to the Flat Base at E1, E2, E3, E4, E5, E6, E7, E8 and E9 locations.

Gap Between the Bike Path Railing Top pipe to the Divider Bike Path Railing pipe at location G.

Vertical offsets at locations V3, V4, V5, V6, V7 and V8.

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Performed the Dimensional Inspection and observed results are in general compliance with the tolerances, during the course of inspection ZPMC Mr. Chen Shi Gang and ABF Mr. Liu Cheng were present. Informed the results of Inspection to Caltrans Lead Inspector for further disposition.

Please reference the pictures attached for more comprehensive details.

Cross Beam (CB) # 18

This QA Inspector performed Dimension Control Inspection along with Caltrans QA Inspector for measuring Gap between the stiffeners at the following locations.

At Floor Beam (FL3) extension at Segment 13AE to Cross Beam # 18 stiffeners.

At Panel Point (PP) 118, Segment 13AE Gap measurement performed between Floor Beam (FL3) stiffeners to west side Vertical Web Plate stiffeners of cross beam # 18 total 13 stiffeners.

At Panel Point (PP) 119 (-1500), Segment 13AE Gap measurement performed between Floor Beam (FL3) stiffeners to west side Vertical Web Plate stiffeners of cross beam # 18 total 13 stiffeners.

At Panel Point (PP) 119, Segment 13AE Gap measurement performed between Floor Beam (FL3) stiffeners to west side Vertical Web Plate stiffeners of cross beam # 18 total 13 stiffeners.

At Deck Panel extension at Segment 13AE to Cross Beam # 18 stiffeners.

Between Panel Point (PP) 118 to PP 119 (-1500), Segment 13AE Gap measurement performed between Deck Panel (FL3) stiffeners to Deck Panel stiffeners of cross beam # 18 total 7 stiffeners.

Between Panel Point (PP) 119 (-1500) to 118, Segment 13AE Gap measurement performed between Deck Panel (FL3) stiffeners to Deck Panel stiffeners of cross beam # 18 total 3 stiffeners.

At Bottom Panel extension at Segment 13AE to Cross Beam # 18 stiffeners.

Between Panel Point (PP) 118 to PP 119 (-1500), Segment 13AE Gap measurement performed between Bottom Plate stiffeners to Bottom Panel stiffeners of cross beam # 18 total 7 stiffeners.

Between Panel Point (PP) 119 (-1500) to 118, Segment 13AE Gap measurement performed between Bottom Plate stiffeners to Bottom Panel stiffeners of cross beam # 18 total 3 stiffeners.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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## Summary of Conversations:

No relevant conversations were reported on this date.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Math,Manjunath

Quality Assurance Inspector

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**Reviewed By:** Miller,Mark

QA Reviewer